

Applicant: Parsons

Docket No. 03-063

CLAIMS

What is claimed is:

1. A self-propelled vehicle, comprising:

a main frame which includes a main-frame longitudinal axis,

a first wheel/suspension assembly connected to said main frame near a first end of said main frame,

a second wheel/suspension assembly connected to said main frame near a second end of said main frame,

a power plant supported by said main frame,

a power transmission means connected to said power plant for transmitting power from said power plant to said first wheel/suspension assembly or to said second wheel/suspension assembly,

a steering system connected to said first wheel/suspension assembly and said second wheel/suspension assembly, wherein said steering system includes a steering controller which turns said first wheel/suspension assembly and said second wheel/suspension assembly simultaneously, wherein said first wheel/suspension assembly and said second

Applicant: Parsons

Docket No. 03-063

wheel/suspension assembly are simultaneously turned in opposite directions,

a dump box and dump box hoist mechanism supported by said main frame, and

an operator's cab supported by said main frame along a transverse cab axis at a substantially constant longitudinal position along said main frame, wherein said transverse cab axis is substantially perpendicular to said main-frame longitudinal axis, and wherein said steering controller is located inside said operator's cab.

2. The self-propelled vehicle of claim 1 wherein said steering controller is hand-operated.

3. The self-propelled vehicle of claim 1, further including:

an image-reception-based pathway monitoring system which includes multiple image receivers and multiple viewing screens for monitoring said multiple image receivers, wherein said multiple viewing screens are located inside said operator's cab.

Applicant: Parsons

Docket No. 03-063

4. The self-propelled vehicle of claim 3 wherein said multiple viewing screens are positioned in said operator's cab such that an operator need not change one's directional orientation when said vehicle moves in opposite directions.

5. The self-propelled vehicle of claim 3 wherein said image-reception-based pathway monitoring system includes image receivers that view blind spots near said vehicle that are not directly visible by the operator inside the operator's cab.

6. The self-propelled vehicle of claim 3 wherein said image-reception-based pathway monitoring system includes image receivers that view areas near said vehicle that are would be visible by the operator in the operator's cab if the operator turned his head so as to face such viewable areas.

7. The apparatus of claim 3 wherein:

 said image-reception-based pathway monitoring system is comprised of a television-based pathway monitoring system, and
 said multiple image receivers include a camera cluster.

8. The self-propelled vehicle of claim 1 wherein said

Applicant: Parsons

Docket No. 03-063

operator's cab is located at a medial position on said main frame.

9. The self-propelled vehicle of claim 1 wherein said power transmission means transmit power from said power plant to both said first wheel/suspension assembly and said second wheel/suspension assembly.

10. The self-propelled vehicle of claim 1 wherein said operator's cab is located on said transverse cab axis at a selected location either on one side of said main-frame longitudinal axis or the opposite side of said main-frame longitudinal axis.

11. The self-propelled vehicle of claim 1, further including:

a hydraulic fluid module, powered by said power plant, for providing power to said dump box hoist mechanism for lifting said dump box.

12. The self-propelled vehicle of claim 11 wherein: said operator's cab is located on said transverse cab

Applicant: Parsons

Docket No. 03-063

axis selectively on one side of said main-frame longitudinal axis, and

 said hydraulic fluid module is located on said transverse cab axis selectively on an opposite side of said main-frame longitudinal axis.